

REMARKS

Claims 1-31 are currently pending in the present application and are presently under consideration. Claims 20 and 21 have been cancelled herein, and claims 32 and 33 have been added. Additionally, claims 1, 2, 14, 22, 25, 26, 30, and 31 have been amended herein. All pending claims with status identifiers are found at pages 2-6.

Favorable reconsideration is requested in view of the comments below.

I. Rejection of Claims 1-31 Under 35 U.S.C. §101

Claims 1-31 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Withdrawal of this rejection is respectfully requested for at least the following reasons. Independent claims 1, 14, 22, 25, 26, 30, and 31 have been amended herein to clearly illustrate that elements within such claims are associated with a computer. In particular, claim 1 as amended is directed towards a ***computer-implemented system*** that includes ***a difference component within a computer***, wherein such component performs a function (*e.g.*, determines differences between XML data sources). Accordingly, this claim includes functional descriptive material within a computer, thereby rendering it structurally and functionally interrelated to the computer and is therefore directed to statutory subject matter (*See In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994). Claims 14, 22, 25, 26, 30, and 31 have been similarly amended. Furthermore, it is readily apparent that these claims, as well as independent claim 24, produce a useful, tangible, and concrete result.

Because the claimed process [method] applies the Boolean principle to produce a useful, concrete, tangible result ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998) (finding a system implementing a financial management structure satisfied §101 because it constituted a practical application of a mathematical algorithm by producing a useful, concrete and tangible result).

Independent claim 1 recites system components (a difference component and a

formatter) that *determine differences between XML data sources* and *describes and outputs the differences together with a representation of at least one of the XML data sources*. Thus, claim 1 recites independent acts (determining, describing, and outputting) that are performed on non-abstract ideas (XML data sources) to produce useful, concrete, and tangible results (differences between the XML data sources). The specification provides several examples of practical applications along with satisfactory explanations that illustrating the usefulness of the claimed system; - such as; "... the difference information provided by the diffgram enables change-specific portions of a database... to be updated without affecting or re-transmitting other associated data" (See p. 2 line 29 – page 3 line 1), "... applications such as a database manager, for example, can efficiently update a database without replicating redundant information...", (See p. 3, lines 4-6), and "Previous erroneous entries can then be efficiently purged *via* the difference information provided by the diffgram." (See page 5, lines 15-16). The systems of claims 22, 24, 25, 26, 30, and 31 are also employable to produce the above exemplary results. With regards to method claim 14, such claim is limited to a practical application, as it provides a useful, concrete, and tangible result. In particular, the method *fills a container with previous state results... and determines whether corrective procedures should be taken*. Accordingly, this claim produces at least the aforementioned useful, concrete, and tangible results associated with the system claims (e.g., claims 1, 22, 24, 25, 26, 30, and 31).

In view of at least the above, it is readily apparent that the claimed invention produces a useful, concrete, tangible result (e.g., differences between XML documents, diffgrams including the differences, ...) pursuant to *AT&T Corp. v. Excel Communications, Inc.* Accordingly, this rejection should be withdrawn.

II. Rejection of Claims 1-31 Under 35 U.S.C. §103(a)

Claims 1-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Multer, *et al.* (US 6,694,336) in view of Baisley (US 6,502,112). Reconsideration and allowance of these claims is respectfully requested for at least the following reasons. Neither Multer, *et al.* nor Baisley, alone or in combination, teach or suggest all limitations recited in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed invention relates to novel systems and methodologies that enable databases to be efficiently updated and/or corrected based upon differences located in XML data sources together with data from an XML data source. These differences and XML data, for example, can be packaged together in a format readable by database managers. With respect to claim 1, such benefits are achievable through utilization of *a formatter associated with the difference component that describes and outputs differences... between XML data sources... together with a representation of at least one of the XML data sources*. Claim 26 includes a similar limitation: *one or more diffgrams that describe the differences between a reference data source and one or more data records, the one or more diffgrams further includes a representation of one of the data records*. Neither Multer, *et al.* nor Baisley teach or suggest such novel features of applicants' claimed invention.

Multer, *et al.* relates to systems and methodologies that are utilized in connection with synchronizing data across disparate applications and/or different systems. For instance, the teachings of Multer, *et al.* can be employed to synchronize data existent between a cellular phone, a personal computer, and any number of other suitable devices. In a more specific example, it may be desirable to a user to have substantially similar data upon a calendar within a cellular phone as data upon a calendar within such user's desktop computer. To effectuate synchronization between the cellular phone and the desktop computer, differences between data as it exists on the cellular phone and the

desktop can be determined. For example, a difference engine resident upon the cellular phone, the desktop, or a central storage unit can determine how data on one device (*e.g.*, the cellular phone) differs from data upon another device (*e.g.*, the desktop computer). (See Fig. 1, col. 5, line 56 – col. 6, line 5). The differences between data (and, if necessary, instructions on effectuating an update) are provided to a system that needs to be updated, rather than an entire document or calendar being delivered to such system. Therefore, an advantage taught by Multer, *et al.* is that synchronization of systems/devices/applications can be made more efficient as differences, and not entireties of data associated with an application, are communicated between systems (See col. 5, lines 31-34).

In contrast to Multer, *et al.*, the invention as claimed does not relate to synchronization of data between multiple systems, but rather relates generally to communication of XML data, and more particularly to enabling change-specific portions of a database to be updated without altering or re-transmitting other associated data. Accordingly, rather than simply delivering differences in data between applications, the formatter of the claimed invention ***describes and outputs differences... between XML data sources... together with a representation of at least one of the XML data sources.*** Thus, for instance, if a database crashes, a container that includes the outputted differences and the representation of at least one of the XML data sources can be utilized to repopulate the database with appropriate data and/or reconstruct the database. (See pg. 8, lines 11-13). If only differences in data were delivered, as is taught in Multer, *et al.*, such repopulation and/or reconstruction of a database would not be possible. Accordingly, it is readily apparent that Multer, *et al.* does not teach or suggest ***describing and outputting differences together with a representation of at least one of the XML data sources.***

Baisley discloses systems and methods for ensuring that disparate XML-based documents have identical contents, and outputs a data value according to the comparison (*e.g.*, an output signifies whether the XML documents are equal or unequal). Like Multer, *et al.*, however, it is readily apparent that Baisley does not teach or suggest ***describing and outputting differences together with a representation of at least one of the XML data sources***, as the system/method of Baisley outputs a value indicative of

similarity between documents (rather than differences, descriptions of differences, and/or a representation of a data source).

Referring now to independent claim 14, Multer, *et al.* does not teach or suggest ***filling a container with previous state results and current state results based at least in part upon a comparison... between two or more source files*** (and further fails to teach or suggest similar limitations recited in claims 22, 24, 25, and 31). As described above, Multer, *et al.* teaches improving efficiency during synchronization between multiple systems, applications, and/or devices by delivering differences in data between such devices. For instance, rather than transmitting entire emails between systems, replying and forwarding e-mail is made more efficient by forwarding only differences in e-mails between systems. (See col. 5, lines 31-34). Thus, ***filling a container with previous state results and current state results based at least in part upon a comparison... between two or more source files***, as recited in this claim (or utilizing any state results within a data packet), would render synchronization between systems/applications/devices less efficient, and thus runs contrary to the purpose of the teachings of Multer, *et al.* Further, as described above, Baisley does not make up for this deficiency, as Baisley teaches outputting a value indicative of whether two disparate XML documents are identical, and nowhere mentions ***filling a container with previous state results and current state results***.

With respect to independent claim 30, both Multer, *et al.* and Baisley are silent with regards to an ***ordering system, a comparison of inventory records, and indicating status of inventory***. As stated above, Multer, *et al.* teaches a synchronization system that synchronizes data between applications, systems, and/or devices, and Baisley discloses determining whether XML documents are identical. Nowhere in either cited reference is there any reference to an ordering system and/or inventory, much less indicating status of inventory as a function of a comparison between inventory records.

As neither Multer, *et al.* nor Baisley teach or suggest various novel aspects of the invention as recited in claims 1, 14, 22, 24-26, 30, and 31 (and all claims which depend therefrom), it is readily apparent that this rejection should be withdrawn.

CONCLUSION

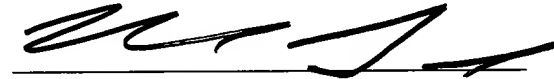
The present application is believed to be condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063[MSFTP297US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS

The attached drawing sheet includes changes to Fig. 8, as a typographical error associated with reference numeral 470 has been corrected. This sheet replaces the original sheet comprising Fig. 8.

Attachment: Replacement Sheet